

ALTO SHAAM®



C O M B I T H E R M®



# THE COMBITHERM® FROM ALTO-SHAAM

It brings more to the table – and more to your kitchen – than ever before.

**Here's your challenge:** Make your foodservice operation more efficient while improving product quality and driving down costs.

**Here's your solution:** The EcoSmart™ Combitherm ovens from Alto-Shaam. In fact, no other combi oven—and certainly no other single appliance—provides your kitchen with so much versatility, reliability and performance.

**The Combitherm is ideal for every application:** From a la carte to volume production for banquets or institutions. And because it tackles so many menu assignments, it eliminates the need for two, maybe even three, separate appliances. You save space without sacrificing results, utility or efficiency.

## IT OVEN-FRIES



Gold-n-Brown™ adds rich, even color and a crisp, crunchy texture.

## IT STEAMS



Select from three steam settings: Automatic, Quick, and Low Temp.

## IT RETHERMS



Use retherm mode for fast, thorough bulk food or plate regeneration.

## IT BAKES



Precise temperature and uniform heat flow for perfect results time after time.

## IT ROASTS



Prepare tender and juicy meats. Automatic humidity control helps maximize yield.

## IT SMOKES



Combitherm's exclusive smoking feature offers the versatility of hot- or cold-smoked food preparation.



Healthcare



Supermarket



Restaurant



Catering



Hospitality



School and University

## MORE COOKING VERSATILITY. MORE MENU VARIETY.

**The all-in-one solution.** Combitherm does it all. It's a steamer that lets you poach salmon or steam vegetables without sacrificing delicate flavor. It's a convection oven that circulates hot air and browns food – including many foods that once required frying. And, of course, it's a combi oven that makes it easy to combine steam and convection heat to cook meat, fish and poultry up to 50% faster.

**Exclusive smoking feature.** Plus, the Combitherm is the only combi oven on the market featuring our patented\* smoking feature. So now you can use Combitherm to prepare everything from cold-smoked salmon to spareribs.

\*U.S. Patent 7,157,668

## 18 MODELS TO CHOOSE FROM

Wide selection means you can choose a Combitherm that matches your application needs precisely. Choose gas or electric models. Choose floor-standing models or countertop units. Or choose two or more Combitherms to accommodate a wider variety of cooking functions simultaneously. Stack one Combitherm on top of another – or stack your Combitherm with an Alto-Shaam convection or cook/hold oven – for additional space savings.

## AND IT'S FROM ALTO-SHAAM

Intelligent design that responds to the needs of our customers. Innovative performance features. Legendary craftsmanship and dependability. This is why people rely on Alto-Shaam. It's why you can be certain Combitherm ovens will exceed the quality you demand in your equipment.



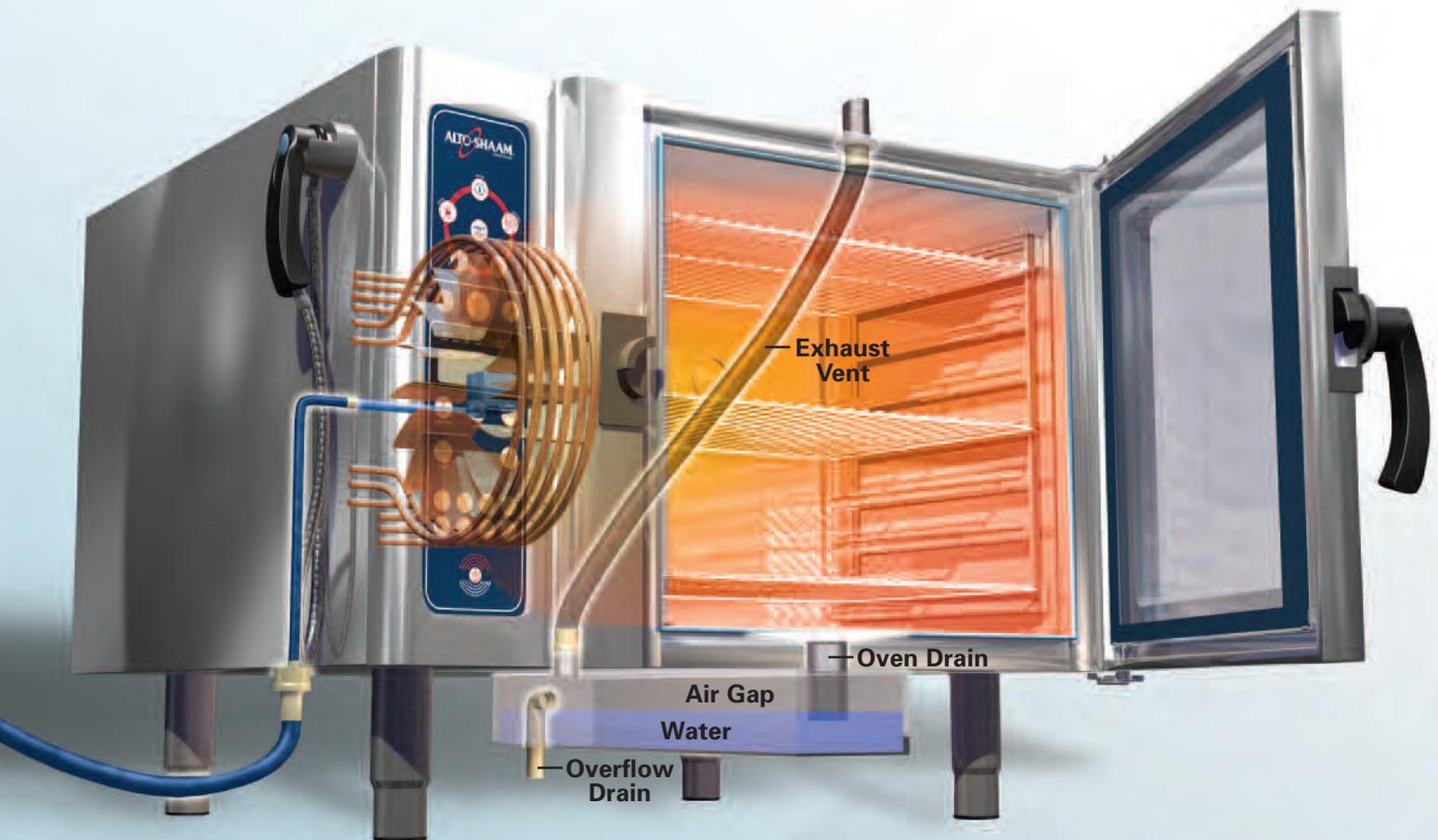
EcoSmart™ products demonstrate our commitment to greener, more energy-efficient technology.



All Combitherm ovens are designed and built in the U.S.A.

# THE ECOSMART™ ADVANTAGE

Good for the environment. Great for your bottom line.



EcoSmart system technology is your assurance that Combitherm ovens are designed to drive down ownership costs and minimize environmental impact.

For instance, the Combitherm seals in the steam used for cooking cycles. So Combitherm uses *70% less water* than conventional combi ovens. That's because, unlike "open system" oven design, steam has no direct escape route.

Plus, Combitherm steam levels are adjusted automatically. Adjustments are based on oven temperature and product load to simplify operation and take any guesswork out of control settings.

The EcoSmart system also admits less cold air into the cooking chamber. High temperatures are easier to maintain, temperature fluctuations are kept to a minimum, and faster cooking times are achieved. Savings from more efficient use of gas, electricity and water also contribute to a faster ROI.

## **BOILER-FREE DESIGN**

All gas Combitherms (and select electric models) feature a "boiler-free" design. Boiler and steam generator maintenance is completely eliminated. There's also no need for generator flushing, water reservoirs or level controls.

# WHAT MAKES COMBITHERM® DIFFERENT?

## COMBITHERM SMOKER

Combitherm is the only combi oven offering complete smoking capability in addition to standard combi cooking modes. Available in more than ten of our boiler-free models, our patented smoking feature gives you the ability to smoke any product – hot or cold. Plus, the Combitherm can go from smoker mode to steaming *with no flavor carryover*.

## THE GOLD-N-BROWN FINISHING TOUCH

Now you can actually cook high-moisture products – including poultry and french fries – to a lovely and even golden brown without the fuss, fats or health concerns associated with deep fat frying.

## STEAM VENTS AUTOMATICALLY

Our patented Automatic Steam Venting safety feature helps eliminate incidental burns. All steam is vented from the oven moments before cooking time expires.

## HACCP DOCUMENTATION

Combitherm ovens feature built-in interfaces to accommodate HACCP documentation software. So every detail of each cooking procedure can be thoroughly documented in accordance with HACCP criteria.

All relevant information is recorded and stored, and is accessible from one or more computer stations. Information can then be stored and displayed in a detailed overview for evaluation and printing.

## WEB-BASED DOCUMENTATION WITH KITCHEN MANAGEMENT

With HACCP/Kitchen Management software you can now manage multiple pieces of equipment in the fully integrated kitchen. Plus, the software offers full NAFEM Data Protocol compliance with real time data transfer and automated logging. Wireless option is also available.



Smoke any food item – hot or cold – with the patented Combitherm Smoker.



Gold-n-Brown™ makes it easy to brown food and achieve a crispy texture – without the use of unhealthy fats or oils.



HACCP documentation is displayed in a detailed overview for evaluation and printing.

# STREAMLINE YOUR ENTIRE KITCHEN WITH RACK MANAGEMENT

What is Rack Management? First developed by Alto-Shaam, it's an easier and more efficient way to prepare and hold foods in high-volume applications. And one of Rack Management's key components is the Combitherm®.

The Rack Management system is a thoroughly integrated approach to high-volume food production. It uses interchangeable roll-in carts to transfer pans or plates of food from station to station. Menu items can be rolled into the Combitherm, cooked, and then moved to an Alto-Shaam QuickChiller™ for up to five days of refrigerated storage.

Once removed from the QuickChiller, prepared foods can then be plated, rolled back to the Combitherm for retherming, and then placed in a Halo Heat® CombiMate® holding cabinet.

Rack Management is a simple and efficient way to streamline production and reduce labor costs. It simplifies menu preparation, letting you prepare many items outside of peak production periods. Plus, it helps enhance food safety by reducing the risks associated with food handling and cross contamination.

## 1 COOK



Food is prepared ahead of time in the Combitherm.

## 2 CHILL



Once cooked, food can be removed from the Combitherm, then chilled and stored in the QuickChiller.

## 3 RETHERM



As serving time nears, food is placed back into the Combitherm for retherming.

## 4 HOLD



Rethermed food can be placed in the Halo Heat CombiMate holding cabinet until ready to serve.



# ECOSMART™ COOKING CONTROL DOES THE THINKING FOR YOU

Fully automatic smart control simplifies Combitherm operation. Rapid-Touch™ program selection and an easy-to-read instruction display (programmed in multiple languages) lets you bake, roast, broil, steam or retherm – all at the touch of a button. Simplifies operation while safeguarding product consistency.

## DELUXE PROGRAM OPTION

Deluxe Model Combitherms let you pre-program up to 250 multi-step cooking procedures. Each procedure can be programmed with up to 20 individual cooking steps, and then stored in memory by name or number.



### STEAM MODE

- Automatic steaming at 212°F (100°C)
- Quick steaming between 213°F and 248°F (101°C and 120°C)
- Low temperature steaming between 86°F and 211°F (30°C and 99°C) – for poaching or proofing



### COMBINATION MODE

- Combines steam and convection modes for faster preparation and better moisture retention
- Improves yield, quality and shelf life
- Automatic humidity control
- Temperature range of 212°F to 482°F (100°C to 250°C)



### CONVECTION MODE

- Cooking, roasting, baking and finishing applications at a temperature range of 86°F to 482°F (30°C to 250°C)



### RE THERM MODE

- Bulk food or plated meal reheating with automatic steam injection
- Automatic humidity control
- Temperature range of 248°F to 320°F (120°C to 160°C)



### CORE TEMPERATURE MODE

- Removable single-point probe monitors cooking time and core food temperature



#### Rapid-Touch

A frequently cooked menu item can be assigned its own Rapid-Touch key. Press the Rapid-Touch key once and Combitherm handles the complete cooking program. Available on Deluxe Model Combitherms.



Control panel is recessed at a 7-degree angle to reduce glare and protect it from damage from passing trolleys or pans.



#### S-Control

Optional rotary dial offers fingertip control of cooking mode, temperature setting and cooking timer. Also features fan speed control, AutoClean™ and cool-down mode. Probe and smoke capabilities are options.

*Note: Not available for HACCP software applications.*

**Name:** Bradley C. Evers  
**Title:** Executive Chef  
**Organization:** Stonebriar Country Club  
**Location:** Frisco, Texas

***“The Combitherm is very simple to operate and makes fast transitions to steaming, super-heat steaming, straight convection or bio steaming.”***

# MORE COMBITHERM® FEATURES

## ROTARY DOOR HANDLE

Flush-mounted handle maintains a positive seal to the gasket. The initial rotation position allows steam to vent before door is fully opened. Magnetic closure allows door to be elbowed shut.



## REMOVABLE TEMPERATURE PROBE

Single-point probe is standard and attaches to oven interior. (Optional multi-point probe also available.)



## HAND-HELD HOSE

Ergonomically designed. Features back-flow preventer and conveniently located shutoff valve.



## AUTOCLEAN™

Cleaning is made easy with Combitherm's AutoClean, which provides a cleaning and rinsing cycle within a single oven function.



## OPTIONS

## VENTLESS HOOD

Select electric Combitherm models offer Alto-Shaam's factory-installed ventless hood. The hood is self-contained, so there is no need for venting or costly hood installation. Also fully tested, listed and approved by Underwriters Laboratories® for both safety and sanitation.



## RETRACTABLE DOOR

For more elbowroom in cramped kitchens. Features heavy-gauge steel tracks and bearings for added durability. Once opened, the door slides easily back along the oven's side.



# COMBITHERM ACCESSORIES

## ROLL-IN CART

Designed as part of our Rack Management system. Carts quickly transport multiple pans or plates from Combitherm to freestanding QuickChillers™ or heated holding cabinets.



## STACKING COMBINATIONS

Save precious kitchen floor space when you select any combination of tabletop Combitherm pairs in stacked configurations. May also be stacked with convection or cook/hold ovens. Choice of stationary or mobile.



## GREASE COLLECTION SYSTEM

Wheeled system rolls directly under select Combitherm models. Grease is collected from dedicated line, then rolled directly to disposal site.

## FRY BASKET

Stainless steel basket helps deliver even browning, crisp texture and thorough cooking while safeguarding superb taste.



## GRILLING GRATE

Lets you char grill foods to perfection – complete with a uniform grill pattern.



## MARINE CONSTRUCTION

Combitherm ovens are easily modified to standards specified for rugged marine applications.

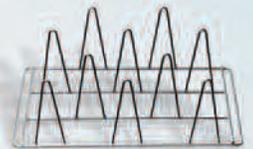
## MULTI-PURPOSE OVEN STANDS

Save space and increase kitchen production when you stack appliances on these heavy-duty stainless steel stands. Available in stationary or mobile configurations.



## CHICKEN ROASTING RACKS

Stainless steel racks position up to ten birds upright. Position ensures even browning while fat drippings collect in bottom pan.



## SECURITY DEVICE PACKAGE

Factory-installed modifications, including tamperproof hardware to safeguard Combitherm components used in high-security applications.

## COMBIGUARD™ WATER FILTRATION SYSTEM

Triple filtration protects against scale buildup and surface corrosion, adding years to oven life. Also reduces chlorine content and guards against impurities as small as ½ micron. Replacement filters also available.



## MULTI-POINT TEMPERATURE PROBE

Four-point sensing for more precise measurement of internal temperatures.

**Name:** Terry J. McCulloch  
**Title:** Executive Corporate Chef  
**Organization:** Leisure Care Retirement Communities  
**Location:** Kirkland, Washington

***"I spoke with our President/CEO about the perceived values and he agreed. When you look at the cost-investment on return, the equipment pays for itself."***

# COMBITHERM® SPECIFICATIONS



## 6.10 ES / ESi

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
6		6
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
208-240V 1PH ES	40.5-47	8.4-11.2
208-240V 1PH ESi	41-47	8.5-11.2
208-240V 3PH ES	23.5-27	8.4-11.2
208-240V 3PH ESi	23.3-27	8.4-11.2
380-415V 3PH ES	13-16	8.4-11.2
380-415V 3PH ESi	13-15.6	8.5-11.2
440-480V 3PH	20-22	15.4-18.4
DIMENSIONS		
35-3/16" x 43-7/8" x 34-1/16" 893mm x 1114mm x 864mm		

## 6.10 ESiN

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
6		6
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
208-240V 1PH	41-47	8.5-11.2
208-240V 3PH	23.3-27	8.4-11.2
380-415V 3PH	13-15.6	8.5-11.2
440-480V 3PH	20-22	15.4-18.4
DIMENSIONS		
35-3/16" x 35-13/16" x 35-9/16" 893mm x 909mm x 903mm		

## 10.10 ES / ESi

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
10		10
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
208-240V 1PH	67-77	13.9-18.4
208-240V 3PH ES	38.5-44	13.8-18.3
208-240V 3PH ESi	38.6-44.3	13.9-18.4
380-415V 3PH ES	21.5-25.6	14.2-18.4
380-415V 3PH ESi	21.1-25.6	13.9-18.4
440-480V 3PH	20-22	15.4-18.4
DIMENSIONS		
41-1/2" x 43-7/8" x 34-1/16" 1053mm x 1114mm x 865mm		

## 10.10 ESiN

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
10		10
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
208-240V 1PH	67-77	13.9-18.4
208-240V 3PH	38.6-44.3	13.9-18.4
380-415V 3PH	21.1-25.6	13.9-18.4
440-480V 3PH	20-22	15.4-18.4
DIMENSIONS		
41-3/8" x 35-7/8" x 35-11/16" 1050mm x 910mm x 905mm		



### ELECTRIC MODELS

### GAS MODELS

#### PAN DIMENSIONS

##### FULL-SIZE

20" x 12" x 2-1/2"  
(530mm x 325mm x 65mm) GN 1/1

##### FULL-SIZE SHEET

18" x 26" x 1"  
(457mm x 660mm x 25mm)  
on wire shelves

##### HALF-SIZE SHEET

18" x 13" x 1"  
(457mm x 330mm x 25mm)  
on wire shelves

## 6.10 ESG

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
6		6
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
110-120V 1PH	5.7	0.68
BTU RATING		
45,000 BTU		
DIMENSIONS		
34" x 42-1/16" x 37" 863mm x 1068mm x 939mm		

## 10.10 ESG

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
10		10
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
110-120V 1PH	5.7	0.68
BTU RATING		
68,000 BTU		
DIMENSIONS		
43-5/8" x 42-1/16" x 37" 1108mm x 1068mm x 939mm		

## 7.14 ESG

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
14	7	
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
110-120V 1PH	5.7	0.68
BTU RATING		
91,000 BTU		
DIMENSIONS		
42" x 49-13/16" x 44-7/16" 1066mm x 1265mm x 1128mm		



### 7.14 ES / ESi

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
14	7	
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
208-240V 1PH	67-77	13.9-18.4
ES 208-240V 3PH	38.5-44	13.8-18.3
ESi 208-240V 3PH	38.6-44.3	13.9-18.4
ES 380-415V 3PH	21.5-25.6	14.2-18.4
ESi 380-415V 3PH	21.1-25.6	13.9-18.4
440-480V 3PH	20-22	15.4-18.4
DIMENSIONS		
34-1/4" x 43-7/8" x 42-13/16" 869mm x 1114mm x 1087mm		

### 10.18 ES / ESi

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
20	10	
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
ES 208-240V 3PH	61.3-70	22-29.2
ESi 208-240V 3PH	61.1-70.3	22-29.2
380-415V 3PH	33.5-40.7	22-29.2
ES 440-480V 3PH	36-43.5	27.2-36.1
ESi 440-480V 3PH	35.7-43.5	27.2-36.1
DIMENSIONS		
40-7/16" x 43-7/8" x 42-13/16" 1026mm x 1114mm x 1087mm		

### 12.20 ES

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
24	12	
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
208-240V 3PH	75.6-87	27.2-36.1
380-415V 3PH	41.4-50	27.2-35.7
440-480V 3PH	36-43.5	27.2-36.1
DIMENSIONS		
54-3/8" x 46-3/4" x 48" 1381mm x 1186mm x 1218mm		

### 20.20 ES

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
40	20	
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
208-240V 3PH	151.2-173.4	54.4-72.2
380-415V 3PH	83-101	54.4-72.2
440-480V 3PH	71.5-87	54.4-72.2
DIMENSIONS		
76-1/4" x 46-3/4" x 48" 1936mm x 1186mm x 1218mm		



### 10.20 ESG

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
20	10	
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
110-120V 1PH	7.8	0.936
BTU RATING		
105,000 BTU		
DIMENSIONS		
52-11/16" x 49-13/16" x 45-3/16" 1337mm x 1265mm x 1148mm		

### 12.18 ESG

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
24	12	
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
110-120V 1PH	7.8	0.936
BTU RATING		
105,000 BTU		
DIMENSIONS		
51-1/16" x 49-13/16" x 45-3/16" 1296mm x 1265mm x 1148mm		

### 20.20 ESG

PAN CAPACITY		
FULL-SIZE	FULL-SIZE SHEET	HALF-SIZE SHEET
40	20	
VOLTAGE [V] PH	CURRENT [A]	POWER [kW]
110-120V 1PH	22	2.64
BTU RATING		
190,000 BTU		
DIMENSIONS		
76-5/8" x 49-13/16" x 45-3/16" 1946mm x 1264mm x 1148mm		

Add more versatility to the kitchen and save valuable floor space by stacking paired Combitherm ovens. Combitherms may also be paired with our convection or cook/hold ovens.



## TRY IT BEFORE YOU BUY IT AT OUR NEW CULINARY CENTER

"Hands-on" product demonstrations are available at over 60 authorized training centers throughout the U.S., including our new Culinary Center, as well as in key locations throughout the world. Call us or visit our Web site for details.

## ASK OUR CHEFS

Wondering which piece of Alto-Shaam equipment is best for your menu? Looking for new serving suggestions or recipes? Visit the "Chef's Table" section of our Web site ([www.alto-shaam.com](http://www.alto-shaam.com)). Post your question and one of our staff chefs will respond promptly with an answer.

## WORLDWIDE SALES & SERVICE

Alto-Shaam truly is a global company. You'll find Alto-Shaam representatives throughout the U.S.A. and distributors in over 50 countries offering complete sales and service support.

**Name:** Lisa Hanshumaker  
**Title:** Food Service Specialist  
**Organization:** Indianapolis Public Schools  
**Location:** Indianapolis, Indiana

*"Thank you for an informative and delicious training session. I came away with a good understanding of Halo Heat technology and your Combitherm oven."*



W164 N9221 Water Street  
P.O. Box 450  
Menomonee Falls, WI 53052-0450, U.S.A.  
Phone: 262-251-3800  
U.S.A. & Canada: 1-800-558-8744  
Fax: 262-251-7067  
Fax U.S.A. Only: 1-800-329-8744  
[www.alto-shaam.com](http://www.alto-shaam.com)  
© 2008 Alto-Shaam, Inc.